AMENDMENTS TO THE CLAIMS

Please cancel claims 1-26 without prejudice to applicant's right to pursue the subject matter of the claims in a later-filed application. Please also add new claims 27-38. This listing of claims will replace all prior versions and listings of claims in the application:

1-26. (Cancelled)

27. (New) A method for reducing memory dysfunction associated with damaged hippocampal tissue, comprising contacting a hippocampal cell with a morphogen comprising a conserved C-terminal seven-cysteine skeleton that is one or more of the following:
(a) at least about 60% identical to residues 330-431 of human OP-1 (SEQ ID NO: 2); and
(b) at least about 70% homologous to residues 330-431 of human OP-1 (SEQ ID NO: 2).

28. (New) The method of claim 27, wherein said morphogen stimulates synapse formation between hippocampal neurons.

29. (New) The method of claim 28, wherein said morphogen comprises residues 30-292 of SEQ ID NO:2.

30. (New) The method of claim 28, wherein said morphogen comprises residues 330-431 of SEQ ID NO:2.

31. (New) The method of claim 28, wherein said morphogen comprises residues 48-292 of SEQ ID NO:2.

32. (New) The method of claim 28, wherein said morphogen comprises the amino acid sequence of SEQ ID NO:2.

33. (New) The method of claim 28, wherein said morphogen comprises residues 292-330 of SEQ ID NO:2.

34. (New) The method of claim 28, wherein said morphogen comprises residues 292-431 of SEQ ID NO:2.

35. (New) The method of claim 28, wherein said morphogen comprises residues 30-431 of SEQ ID NO:2

36. (New) The method of claim 28, wherein said morphogen is a BMP-2 polypeptide.

37. (New) The method of claim 28, wherein said morphogen is a BMP-5 polypeptide.

38. (New) The method of claim 28, wherein said morphogen is a BMP-6 polypeptide.